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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,799	11/04/2003	Kazuo Hiraguchi	Q77992	4014
23373	7590	03/26/2008	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			HAUGLAND, SCOTT J	
ART UNIT	PAPER NUMBER		3654	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/699,799	<b>Applicant(s)</b> HIRAGUCHI, KAZUO
	<b>Examiner</b> Scott Haugland	<b>Art Unit</b> 3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 03 January 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al (U.S. Pat. No. 6,764,037) in view of Rambosek (U.S. Pat. No. 6,628,479), LeNoue et al (U.S. Patent No. 5,328,123), and Maehara (U.S. Patent No. 4,466,585).

Hancock et al discloses a recording tape cartridge comprising a substantially rectangular case formed from an upper case and a lower case each having a wall 310, 320 connected to a ceiling or floor plate (upper or lower wall) 110, 120. The case accommodates a single reel 210 on which recording tape is wound. An arc-shaped door 330 closes an opening for pulling out tape.

Hancock et al does not disclose arc-shaped guide walls for the arc-shaped door, border portions between the wall and the ceiling/floor plates that are thinner than the ceiling/floor plates, or screw bosses on the upper and lower cases each having a convex portion and a concave portion which fit together.

Rambosek teaches guiding a slidable door 31 of a recording tape cartridge between with guide walls 40, 14g, 50, 13g in an upper case and lower case of the recording tape cartridge.

LeNoue et al discloses a recording tape cartridge comprising a substantially rectangular case formed from an upper case and a lower case each having a wall 72 connected to a ceiling or floor plate (upper or lower wall). LeNoue et al teaches making border portions between the walls 72 and the ceiling/floor plates thinner than the ceiling and floor plates. The depth of the grooves 74 forming the thinner border portions are 30% to 50% of the thickness of the ceiling or floor plate (col. 4, lines 9-12).

Maehara teaches providing a recording tape cartridge with screw bosses 18, 20, 27, 29, 32, 34 having convex portions and concave portions that fit together.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the recording tape cartridge of Hancock et al with arc-shaped guide walls for the arc-shaped door as taught by Rambosek to provide lateral support for the door.

It would have been obvious to provide the recording tape cartridge of Hancock et al with border portions between the outermost peripheral walls and the ceiling/floor plates that are thinner than the ceiling/floor plates as taught by LeNoue et al to prevent deformation of the cartridge during cooling after molding.

It would have been obvious to provide the recording tape cartridge of Hancock et al with screw bosses having convex portions and concave portions that fit together as

taught by Maehara to secure the upper and lower case together while ensuring proper alignment of the cases before insertion of the screws.

With regard to claims 2, 7-10, 12, and 17-20, the border portions disclosed by LeNoue et al would be 70% to 50% of the thickness of the ceiling or floor plates based on the disclosed groove depths of 30% to 50% of that thickness. Since the walls 72 are disclosed as being substantially the same thickness as the ceiling and floor plates, the ratio of groove depth/border depths to the thickness of the walls would be the same. It would have been obvious to make the thinner border portions 50% to 70% of the thickness of the peripheral walls as taught by LeNoue et al to provide adequate reduction of thickness to prevent deformation of the cartridge case.

#### ***Response to Arguments***

Applicant's arguments filed 1/3/08 have been fully considered but they are not persuasive.

Applicant argues that there is no teaching in the cited references of "arc-shaped guide walls located in an inner surface of the upper case and an inner surface of the lower case and which support an arc-shaped door between the inner surface of the upper case and the inner surface of the lower case" and that the guide slots 41 and 51 for the door in Rambosek are straight, not arc-shaped. However, Rambosek teaches providing guide walls on upper and lower cases for a sliding door of a recording tape cartridge. As would have been apparent to an ordinary artisan, it would have been necessary or highly desirable to provide guides for the door to constrain the door in

Hancock et al against lateral movement during opening and closing and to support it against being pushed in by external pressure. Providing guide walls on the upper and lower cases of the Hancock et al cartridge as taught by Rambosek would have been obvious for this purpose. Guide walls for the arc-shaped door of Hancock et al would necessarily have been arc-shaped to provide a guiding and supporting function analogous to that of the guide walls in Rambosek.

Applicant argues that LeNoue et al does not teach making a border portion between a peripheral wall and ceiling plate or floor plate of a cartridge thinner than the peripheral wall. However, LeNoue et al teaches making a border portion between wall 72 and ceiling and floor plates thinner than the wall 72 to prevent deformation during cooling of the molded case. It would have been obvious to an ordinary artisan to apply this teaching to other intersecting walls such as the peripheral wall and ceiling and floor plates where deformation can occur.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571)272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SJH/  
3/20/08  
/Peter M. Cuomo/  
Supervisory Patent Examiner, Art Unit 3654